



## Iván Arriagada

ANTOFAGASTA

Chief executive

Age: 57

### COMPANY PROFILE

Primary listing	LSE
Headquarters	Santiago, Chile
Market cap	\$19.2 billion
Regional focus	Americas
Commodity	Copper
Production for calendar year 2020	Copper: 733,900t

### What are the top three priorities on your agenda today?

#### Environment

The issue at the front of my mind is climate change and mining's role in the energy transition. We have recently released our greenhouse gas (GHG) emission reduction targets as part of our Climate Change Strategy, and how we manage the transition to clean energy. We're looking to reduce Scope 1 and Scope 2 emissions by 30% by 2025, which is equivalent to around 730,000 tonnes of CO<sub>2</sub>. Our longer-term target is to be carbon neutral by 2050, which is in line with Chile's national target.

I think it's important to mention that we had set a target back in 2018 to reduce GHG emissions by 300,000t of CO<sub>2</sub> by 2022. We've achieved that already so we're ahead of our previous reduction target. That's great news, and it's why we've refreshed our targets now.

These targets will be supported by a number of initiatives, one of which is around renewable energy and moving all our energy contracts over to renewable sources. And, we expect to achieve this by the end of next year. We're also increasing the use of recycled water and seawater at our operations, which means we will use less fresh water and energy. This means lower emissions and it releases continental

water that can be used instead for purposes [aimed at the climate response], such as agriculture. Our operations in northern Chile have traditionally been serviced by seawater and today around 50-60% of the water used at our operations is seawater. At Los Pelambres, our mine in central Chile, we're building a desalination plant to meet our water needs there, too, which means by 2025 we will be using approximately 90% sea and recycled water across all our mines.

Alongside this, we're working on responsible production third party assurance by adopting the Copper Mark. That looks at the environmental footprint of our operations, and our employees, local communities and governance. We are continuing to

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increase reporting and disclosure of all these topics including the metrics to measure and report against.

The other factor here is that copper is a commodity that plays a key role in the modern economy and is part of the solution as the world transitions away from carbon. It will not be possible to shift to electrical solutions without a highly conductive metal like copper. That’s why it’s such an attractive commodity.

The final thing I’d like to mention around climate and the energy transition is that once we decarbonise our energy supply, which we are doing, the bulk of the remaining emissions come from our haul trucks, which we use to move ore and waste rock in our mines. Here, we’re looking at how fossil fuels can be replaced and, in particular, we’re concentrating on solutions using hydrogen and/or batteries. So, we’re pushing for that technology change to make hydrogen commercially viable for haulage. We’ve joined the Chilean Hydrogen Association, which brings together the key players here to work on moving this technology forward and is consistent with the government’s public policy in respect to long-term transport solutions. And, we’ve also recently become a patron of the Charge On Innovation Challenge, a global initiative to jointly develop solutions to enable large-scale haul trucks to run on electric batteries. The goal is to help the mining sector



Image: Antofagasta

reduce its consumption of diesel fuel and cut emissions from surface mine operations.

### Managing systemic risks

This has evolved somewhat and it’s about managing health, safety and wellbeing, but more as a systemic risk across our business. What has been highlighted by the pandemic is the systemic risks from seemingly low probability events that can have a major impact on business. We’ve always mapped and planned for these as best we can, but the pandemic has really tested those contingencies and our ability to be flexible and adapt. The ability of our organisation to be resilient and react to the unforeseen is a priority for us.

We need to create greater capabilities to react, and then nurture that capability so we can continue to respond well. This has required changes to the way we work, as we saw in the pandemic. We are now establishing this hybrid model with more people working from home more of the time – and less people on site and more people online.

Another element that’s changed has been a need for a greater flexibility to move people to and from site with dedicated transport and the logistics associated with that. This is also true of supply-chain logistics in terms of how much is sourced locally versus globally. And local knowledge, too. We have for a long time sourced some technical capabilities from the international market because they have belonged to vendors who provided some of our equipment globally. But now we’re working on localising that knowledge base so we can be more flexible around how we organise our supply chain for goods and services. In the end, it’s central to how we manage risk and worth refreshing how we look at these concerns.

Specifically on safety, we’re pleased with our achievements. We’re in our third consecutive year without a fatality and have significantly reduced high-potential incidents, which is the forward looking metric that we use to measure safety. You could say that what we’re doing around that wider risk management approach on health is an extension of our approach to safety.

### Social licence/community engagement

The role of mining in society is a big issue at the moment, particularly for us in Chile where we are in the process of writing a new constitution. If we think of how mining has worked with society in the recent past, not only are we a provider of jobs and a catalyst

for community development but we are a source of economic continuity, as shown by the impact the pandemic has had on other industries. This is not just Chile; all over the world mining has been a key contributor as one of the few industries where economic activity has not been greatly disrupted and allowed governments to mitigate negative effects elsewhere. As we look to the recovery and building back better, mining will continue to play a central role.

In Chile, with the new constitution, the expectation is that the country needs a new social pact that has a greater emphasis on a social agenda, including amongst these social goods and rights such as pensions, health and education. As mining represents about 10% of GDP, it will need to be a major part of this transition. And, when you think about the links along supply chains and services, it equates to something more like 20% of GDP and 50% of export revenues. Mining will need to continue to support economic development and the social agenda.

But it is important that mining is recognised for its contribution to date, which is not just paying taxes but about jobs and supporting those supply chains and affiliated industries. And to be recognised for the investment and adoption of new technologies. When you look back, the first solar energy facility was brought forward by the mining industry because it has the scale to support investment in these technologies. These technologies are now used in other industries, so there is a multiplier effect.

I mention this because taxation is on the agenda right now in terms of this new social pact and that is completely legitimate. But that conversation needs to happen in the context of mining's greater contribution to society – as a supporter and enabler of a much greater economic and technology footprint, and its position as an engine for growth. Mining must be allowed to continue to play that role. And, this is so important in the context of a pandemic – we maintained our investment in Chile of US\$1.3 billion in 2020 when other industries were retreating from business activities or were forced to look at government assisted support packages.

**What do you anticipate will be the top three priorities on your agenda in the future (10-year horizon)?**

**Environment**

We'd like to be in a position where we're creating net-zero copper. We want to use our current agenda on climate change to eliminate the environmental

and social footprints in place today when producing our copper. Chile is very well placed to do that, as I've mentioned, with so much renewable energy available for mining and existing partnerships for non-carbon mobility. Chile could produce the first net-zero copper and we at Antofagasta could be a key part of that.

**Social licence/community engagement**

Mining's contribution to Chile in terms of economic and societal health will continue. There will also be a greater need going forward for not just mining companies, but all companies to look at social value creation in a more holistic way through multistakeholder engagement. Especially with businesses being asked to play a new role within a new constitution. From that point of view, we will need to reassert the role of business in creating wealth and wellbeing for our communities.

Traditionally, mining as a business has been inward looking in terms of how to produce copper and the processes we undertake. But I think we now need to be much more engaged around social issues and companies need to be built on the bedrock of the core values of social investment and social justice.

**Adapting to digitalisation/automation**

We've seen in the past few years an accelerated transformation in the mining industry, and I would like to think mining will become 'cleaner' by using technology to mitigate environmental and social impact. COVID-19 showed us that technology and innovation can be deployed to mitigate systemic risk to our production, our environment, our employees, and our communities, and this needs to continue.

So, it's using technology to inwardly become more efficient but then to limit our environmental and social footprint for the greater good – this means mining with no tailings, no people underground in the mines, waterless mining and no carbon emissions. This needs to happen to make mining more appealing for future generations.

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